ENVIRONMENTAL CHEMISTS

Date of Report: 03/29/99 Date Received: 03/18/99

Project: Metro Self Monitor, PO# M78624

Date Samples Extracted: 03/25/99 Date Extracts Analyzed: 03/25/99

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	Nickel	Zinc
M78624	0.62	0.61	0.64	0.08
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 903106-01 (Duplicate)

				Relative	
	Reporting	Sample	Duplicate	Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Copper	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Nickel	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Zinc	mg/L (ppm)	< 0.05	0.08	nm	0-20
Nickel	mg/L (ppm)	< 0.05	< 0.05	nm	0-20

Laboratory Code: 903106-01 (Matrix Spike)

		Reporting	Spike	Sample	% Recov	ery % Recov	ery Acceptance	e
Analyte	- 4 F	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium		mg/L (ppm)	5	< 0.05	91	89	80-120	2
Copper		mg/L (ppm)	5	< 0.05	102	100	80-120	2
Nickel		mg/L (ppm)	10	< 0.05	90	90	80-120	0
Zinc		mg/L (ppm)	5	< 0.05	89	88	80-120	1

Laboratory Code: Laboratory Control Sample

		Reporting	Spike	% Recover	ry % Recov	ery Acceptanc	e di di	
_Analyte		Units	Level	LCS	LCSD	Criteria	RPD	
Chromium		mg/L (ppm)	5	101	102	80-120	. 1	
Copper		mg/L (ppm)	5	103	103	80-120	0	
Nickel	TANAL S	mg/L (ppm)	10	102	103	80-120	1	
Zinc		mg/L (ppm)	5	103	102	80-120	1	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenué West Seattle, WA 98119-2029 (206) 285-8282

903115

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SAMPLE CHAIN OF CUSTODY

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REMARKS					SAMPLE DISPOSAL INFORMATION
					Dispose after 30 days Return Samples Call for Instructions
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FORMS/COC

02/17/99

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 29, 1999

DUPLICATE COPY

INVOICE #99ACU0329-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M78624: Results of testing requested by Gerry Thompson for material submitted on March 18, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample \$80.00

Amount Due \$80.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 29, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 18, 1999 from your Metro Self Monitor, PO# M78624 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0329R.DOC